Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: JD Stauffer, LLC

1079 Tamiami Trail Nor., #208 Nokomis, Florida 34275

- 2. Type of action: Application for Beneficial Water Use Permit 41S 30104658
- 3. Water source name: Unnamed Ephemeral Draw (Judith River)
- 4. Location affected by project: N2SE and SWSE of Section 23, Township 19 North, Range 16 East, Fergus County
- 5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:
 - On December 31st, 2015, the Applicant submitted Application for Beneficial Water Use Permit 41S 30104658 for the storage of surface water from an unnamed ephemeral draw, tributary to the Judith River, for year-round fishery and stock purposes. The Applicant proposes to impound all of the water originating in the ephemeral draw by means of an on-stream reservoir and dam located in the SWNESE of Section 23, T19N, R16E, Fergus County. The proposed Stauffer Reservoir will have a capacity of 67.4 AF of water, and the proposed Stauffer Dam will be 38.1 feet high from the base of the dam to its crest. The total volume of water that may be impounded annually is limited to 87.25 AF. The area potentially impacted by issuance of this permit spans from the proposed point of diversion at the Stauffer Dam to the USGS stream gauge near Winifred (06114700) approximately 60 miles downstream.
- 6. Agencies consulted during preparation of the Environmental Assessment (including agencies with overlapping jurisdiction):

Montana Natural Heritage Program
Montana Department of Fish, Wildlife and Parks
Montana Department of Environmental Quality
USDA Natural Resources Conservation Service
U.S. Fish & Wildlife Service

Species of Concern 2005 Dewatered Stream List 303(d) list of impaired streams Web Soil Survey National Wetlands Inventory

Part II: Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

The Department of Fish, Wildlife and Parks (FWP) does not list the Judith River below the proposed reservoir location as dewatered. The Applicant's plan to prevent potential negative downstream impacts includes the installation of flow measurement devices at the inlet and outlet of the proposed reservoir. In the instance that a call for water is made or streamflows as measured at the Judith River USGS stream gauge fall below FWP's instream water right flow rate of 160 CFS, the Applicant will be able to release water through the outlet of the dam at a controlled flow rate equal to inflows measured at the inlet. The proposed project will not alter existing streamflows or impact the Judith River by way of dewatering.

Determination: No negative impact.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

The Judith River downstream of the ephemeral draw proposed for impoundment in this application is not listed as water quality impaired or threatened by DEQ, and it is not expected that this project will negatively affect water quality.

Determination: No negative impact.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: N/A as this proposed appropriation does not involve groundwater.

<u>Diversion Works</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

The proposed Stauffer Dam will impound all of the water originating in an ephemeral draw that is tributary to the Judith River. While events large enough to produce measureable flows in ephemeral draws are likely to also produce greater flows in the water ways to which they are tributary, due to the basin size that this ephemeral draw actively drains, its flow rate and volume contribution to the Judith River is significantly lower than that of the Judith River at their confluence. The Applicant plans to release water out of the dam outlet at a flow rate equaling flows measured at the inlet in the instance that a call for water is made by downstream senior appropriators. The loss of tributary volume from the ephemeral draw to the Judith River will not result in any impacts to flows, streambed morphology, or riparian areas in and along the Judith River. The construction of the dam in the ephemeral draw will not create a barrier to fish migration as the ephemeral nature of the source naturally creates a barrier due to the absence of flows over long periods of time. Riparian vegetation in the immediate vicinity of the

reservoir along with upland vegetation in the reservoir footprint will be inundated, resulting in a loss of vegetation. It is not likely that the loss of this riparian/upland vegetation within the immediate footprint of the reservoir will adversely impact other areas within the ephemeral draw. Well construction will not be impacted as the proposed appropriation does not involve groundwater.

Determination: No negative impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

The Montana Natural Heritage Program was consulted to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern" that could be impacted by the proposed project.

The Montana Natural Heritage Program identified hoary bat (*Lasiurus cinereus*), little brown myotis (*Myotis lucifugus*), plains spadefoot (*Spea bombifrons*), northern redbelly dace (*Chrosomus eos*), and sauger (*Sander canadensis*) as species of concern within the vicinity of the proposed Stauffer Reservoir. No plant species of concern are identified within the vicinity of the project. The proposed impounded area that will comprise the reservoir currently contains large ponderosa pine that will be logged prior to dam construction, which will occur in the late summer or early fall. While ponderosa pine forests are commonly associated with the broader ecological habitats within which hoary bat, little brown myotis, and plains spadefoot have been found in Montana, it is not expected that the proposed project will result in the loss of or negative impact to these species of concern.

The proposed project is located in general sage grouse habitat as designated by Executive Order No. 12-2015 (*Executive Order Amending and Providing for Implementation of the Montana Sage Grouse Conservation Strategy*). The Stauffer Reservoir will have a surface area of approximately 4.8 acres and may displace wildlife inhabiting the land that will be inundated. According to the General Habitat Stipulations outlined in the Executive Order, new project noise levels should not exceed 10 dBA above baseline noise at the perimeter of an active sage grouse lek during the breeding season (March 1st to July 15th), and vegetation removal as part of permitted activities should be limited to the minimum disturbance required by the project. Construction of the Stauffer Dam will occur in the late summer/early fall once sufficient logging of existing ponderosa pine has taken place in the proposed inundated area. It is not expected that the proposed project will cause significant disturbance to sage grouse or sage grouse habitat.

Determination: No significant impact.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: Project does not negatively impact existing wetlands.

<u>Ponds</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

This project involves the impounding of an ephemeral basin tributary to the Judith River by means of a dam and on-stream reservoir for the purpose of fisheries and stock. Fish will be introduced to the

reservoir once it has reached full pool and accumulated an adequate amount of nutrients and dissolved oxygen to sustain fish habitat. The Applicant may appropriate up to 87.25 AF annually. The Stauffer Reservoir will have a maximum depth of 35.1 feet, a surface area of 4.8 acres, and a capacity of 67.4 AF. The Stauffer Dam was classified by DNRC as Not High Hazard and will be 215 feet in length across its crest and 38.1 feet high from the base of the dam to the crest. The dam will contain an emergency spillway 35.1 feet above the base, and an outlet at its base comprised of a 24-inch concrete pipe and slide gate to allow for controlled water releases and regulation of reservoir water levels. It is expected that the reservoir will reach full pool approximately one year after the completion of dam construction.

The proposed source is ephemeral in nature and, due to the basin size that the ephemeral draw actively drains, its flow rate and volume contribution to the Judith River is measurably smaller than the flow rate and the volume of the Judith River at the point where they converge; however, impoundment of any tributary waters to the Judith River may have the potential to adversely affect existing water rights. The Montana DFWP has several instream fishery water rights listing flow rates of 160 CFS within the reach of the Judith River that may be potentially impacted by this project. The Applicant's plan to prevent adverse effect includes the installation of flow measurement devices at the inlet and outlet of the proposed reservoir. In the instance that reservoir levels exceed the emergency spillway or streamflows measured at the Judith River USGS stream gauge drop below 160 CFS, the Applicant will have the ability to release water through the slide gate in the dam outlet at a controlled flow rate equal to inflows measured at the inlet. It is not expected that this project will negatively impact wildlife, waterfowl, or fisheries resources.

Determination: No negative impact.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: This project and related activities will not result in any negative impact to the soils comprising or surrounding the proposed impounded acreage.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Contingent on the approval of this Application, existing ponderosa pine in the proposed reservoir area will be logged before the dam is constructed in order to limit vegetation decay within the reservoir once it has filled. Dam construction and reservoir impoundment are not expected to result in the spread or establishment of noxious vegetation.

Determination: No significant impact.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There will be no source of pollutants associated with this permit that will negatively alter air quality.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands.

Determination: N/A – project not located on state or federal land.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

None identified.

Determination: No impact.

HUMAN ENVIRONMENT

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

The project is located in an area with no locally adopted environmental plans.

Determination: No impact.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: The proposed project will not negatively impact access to or the quality of recreational and wilderness activities.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: This project does not pose a significant risk to human health.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes____ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> – For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

1. Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? None identified.
- (b) Local and state tax base and tax revenues? None identified.

- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) <u>Distribution and density of population and housing</u>? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) <u>Transportation</u>? None identified.
- (j) Safety? None identified.
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts None identified.

Cumulative Impacts None identified.

3. Describe any mitigation/stipulation measures:

No reasonable alternatives were identified in the EA.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:

Part III. Conclusion

- 1. Preferred Alternative: None identified.
- 2. Comments and Responses
- 3. Finding:

Yes No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EIS is not the appropriate level of analysis for the proposed action because no significant impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Danika Holmes

Title: Hydrologist/Water Resource Specialist

Date: March 15th, 2017